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Case Report

Crohn's ileitis and salpingo-oophoritis

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Genitourinary Crohn's disease may precede or follow intestinal involvement and can mimic clinically and pathologically various conditions of the abdominal pelvis.[1] Involvement of the fallopian tube and ovary is relatively rare.[2] We report such a case and discuss various ways in which Crohn's disease manifests itself in the female genitourinary tract.

CASE REPORT

A 58 year old woman presented with lower abdominal pain and diarrhoea leading to a right hemicolectomy for Crohn's disease. She remained asymptomatic for 23 years until recurrence of disease necessitated resection of 17 cm of ileum. Five years later she developed multiple short Crohn's strictures with fistulae and abscesses into the pelvis. Two areas of ileum measuring 10 cm and 29 cm were excised. One year later she re-presented with lower abdominal pain and subacute obstruction. Treatment with several courses of steroids and then azathioprine was unsuccessful and subsequent investigation showed a short area of Crohn's ileitis with two strictures. Stricturoplasty was performed and a further segment of ileum adherent to an inflammatory mass surrounding the right ovary was excised. Post-operatively she is well.

Pathological examination showed a 5 cm length of ileum, strictured at its centre and with histological evidence of deep fissuring ulceration, transmural chronic active inflammation and non-caseating epithelioid and giant cell granulomas typical of Crohn's disease. Milder but similar inflammatory changes were also present at the ileal resection limits. The tubo-ovarian mass weighed 48 grams and measured 5 x 5 x 3 cm (Figure 1). Its cut surface was pale with irregular areas of necrosis. Histology showed florid necrotising, suppurative and non-suppurative granulomatous salpingo-oophoritis. The ovarian cortex and medulla had multiple acute abscesses and occasional fragments of vegetable material due to fistulation from the adherent bowel. Between these areas and also in the adjacent fallopian tube were many granulomas identical to those seen in Crohn's ileitis (Figure 2). Stains for actinomyces, fungus and tubercle were negative and there was no malignancy. A chest radiograph was normal.

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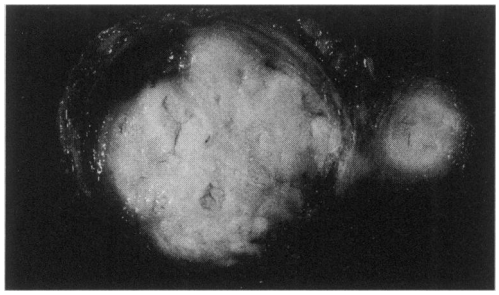

Fig. 1 Right tubo-ovarian mass due to involvement by Crohn's disease.

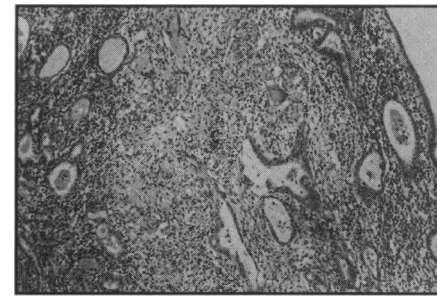

Fig. 2 Crohn's salpingitis. The mucosa is inflamed and contains non-caseating epithelioid and giant cell granulomas.

DISCUSSION

Crohn's disease may show a wide range of intestinal and extra-intestinal manifestations with the latter either preceding, arising concurrently or following gut involvement. In a series of 103 women with Crohn's disease Donaldson[1] noted complications such as abscesses, fistulae, fissures, ulcers and infections involving not only internal pelvic organs but also the vulvovagina, perineum, labia, rectovaginal septum, rectum and anus; sometimes these occurred several months before bowel disease was evident but more frequently within one year of bowel resection. The propensity for ulceration, fistula and abscess formation lends itself to Crohn's disease masquerading clinically as a number of pelvic abnormalities such as appendicitis, pelvic and tubo-ovarian abscess, endometriosis or even malignancy.[1, 2] Donaldson described twelve patients with internal fistulae, five of which were between the affected bowel segment and bladder, vagina, uterus and pelvic adnexae. He also found a significant degree of subfertility and slight increase in spontaneous abortion. Four other publications have detailed pelvic adnexal Crohn's disease.[3-6] All were females in the twenty to thirty year age group who presented with lower abdominal pain for periods of up to one year. In three cases[3-5] the main operative findings were those of Crohn's ileitis and appendicitis involving the right ovary and fallopian tube. As in our case, Honoré [5] noted fistula formation with necrotising, suppurative and granulomatous salpingo-oophoritis. Goldberg[6] described presenting complaints of haematuria at menstruation, faecaluria and pneumaturia as well as abdominal pain caused by sigmoid Crohn's colitis, a left colo-oophorovesicular fistula and salpingitis.

Surgical management was aimed, as far as was feasible, at resection of diseased bowel segments, fistulae and adherent adnexae. In one case [4] there was subsequent colonic, ileal and gingival disease five years post-operatively.

Right adnexal involvement is commoner due to adjacent terminal ileitis and presents with appendicitis-like symptoms. Also, the underlying abnormality can be primary appendiceal disease [3] which is usually an isolated finding but may pre-empt more extensive gut involvement.[7] Left adnexal Crohn's disease was noted due to proximity of a diseased sigmoid segment,[6] and presenting features can mimic diverticular disease or malignancy both on clinical examination and at laparotomy. Even in the pathology laboratory discrimination between an inflammatory and malignant stricture on gross inspection can at

times be difficult and histology is required. Other causes of granulomatous visceral inflammation have to be excluded microscopically (tuberculosis, actinomycosis or fungal infection) and clinically (culture, chest X-ray, tuberculin test). Our case shows the unusual combination of both non-caseating granulomas and suppurative granulomatous inflammation in the right ovary; the former is due to direct involvement by Crohn's disease and the latter fistulisation from the adherent bowel with spillage of some intestinal vegetable debris.[5] Clinicians should be aware of Crohn's disease involving the external and internal genitalia mimicking other inflammatory or neoplastic conditions.

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